

This listing of claims will replace all prior versions of claims in the application.

Claims 1-44. (cancelled)

Claim 45. (new) A chemically-acting positive-acting photoresist composition comprising:

- a) a resin that comprises photoacid-labile groups; and
- b) one or more photoacid generator compounds that upon exposure to activating radiation generate an acid of the formula $R(CR^1R^2)CF_2SO_3H$,

where R is an optionally substituted alkyl having 4 to about 20 carbon atoms, optionally substituted alicyclic group, optionally substituted carbocyclic aryl group, optionally substituted heteroalicyclic group, or optionally substituted heteroaromatic group, and R is not perhaloalkyl; and

R^1 and R^2 are each independently hydrogen or a non-hydrogen substituent.

Claim 46. (new) The photoresist composition of claim 45 wherein R is optionally substituted alkyl.

Claim 47. (new) The photoresist composition of claim 45 wherein R is an optionally substituted alicyclic group.

Claim 48. (new) The photoresist composition of claim 45 wherein R is an optionally substituted carbocyclic aryl group.

Claim 49. (new) The photoresist composition of claim 45 wherein R is an optionally substituted heteroalicyclic group, or optionally substituted heteroaromatic group,

Claim 50. (new) The photoresist composition of claim 45 wherein the one or more photoacid generator compounds are iodonium compounds.

Claim 51. (new) The photoresist composition of claim 45 wherein the one or more photoacid generator compounds are sulfonium compounds.

Claim 52. (new) The photoresist composition of claim 45 wherein the one or more photoacid generator compounds are non-ionic compounds.

Claim 53. (new) The photoresist composition of claim 52 wherein the one or more photoacid generator compounds are sulfonate compounds.

Claim 54. (new) The photoresist composition of claim 45 wherein the one or more photoacid generator compounds are N-oxyimidosulfonate compounds or N-oxyimidosulfonate compounds.

Claim 55. (new) The photoresist composition of claim 45 wherein the one or more photoacid generator compounds are diazosulfone compounds.

Claim 56. (new) The photoresist composition of claim 45 wherein the resin comprises phenolic groups.

Claim 57. (new) The photoresist composition of claim 45 wherein the resin is at least substantially free of aromatic groups.

Claim 58. (new) The photoresist composition of claim 45 wherein the resin is completely free of aromatic groups.

Claim 59. (new) An article of manufacture comprising a coating layer of a photoresist composition of claim 45.

Claim 60. (new) The article of manufacture of claim 59 wherein the article is a microelectronic wafer substrate.